

**REMARKS**

Claims 1-14 and new claims 15-20 are pending. New claims 15-20 are directed to certain aspects of the invention. In particular, claim 15 differs from claim 1 in that claim 15 recites an “alkoxylated” guar gum. Support for an “alkoxylated” guar gum is found in the specification (originally filed) at page 6, line 20. Claims 16-18 recite an ethoxylated guar gum or a propoxylated guar gum or both. Support for an ethoxylated guar gum or a propoxylated guar gum is found in the specification (originally filed) at page 6, lines 20-21. Claim 19 recites that the alkoxylated guar gum is “2-hydroxypropyl ether guar gum.” Support for the “2-hydroxypropyl ether guar gum” is found in the specification (originally filed) at page 8, line 15 of the Table of Example 1 reciting “Guar Gum, 2-Hydroxypropyl Ether”. New claim 20 is a combination of claims 15, 2, 3, and 7 presented in a single claim. Claim 20 is supported by the original claims and by the support for claim 15 noted above. In view of the foregoing, no new matter is introduced by new claims 15-20.

**35 USC § 103(a) Rejection(s) of Record**

Claims 1-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Zocchi (US 5,681,801) in view of Pyles (US 5,576,279) or Bolich, Jr. et al. (hereinafter “Bolich”; US 5,104,646) for the reasons noted at pages 4-7 of the Office Action.

**Zocchi**

The Office Action asserts that Zocchi teaches the use of a xanthan gum and that one would be motivated to add a guar gum to the Zocchi composition because a guar gum is an equivalent of a xanthan gum. Applicants respectfully traverse this line of reasoning for the reasons noted below.

First, since the Zocchi composition already contains a xanthan gum to yield a clear and stable composition, one of ordinary skill in the art would not be motivated to add another

allegedly equivalent gum such as a guar gum to the Zocchi composition. Second, one of ordinary skill in the art would be reluctant to add a different gum such as a guar gum because (it is accepted in the art that) even all xanthan gums are not equivalent. Stated differently, one of ordinary skill in the art would not be motivated to use a guar gum when it is known to one of ordinary skill in the art that inclusion of other xanthan gums adversely affects the stability and/or clarity of the subject composition. In support, the Examiner's attention is respectfully directed to Zocchi at col. 4, lines 42-62, wherein it is stated:

Xantha[n] gums with lower transparency [i.e., lower than the 85% transmittance recited in claim 1 of Zocchi], that is about 70% transmission, did not provide compositions which maintained clarity over time. [(Emphasis added.)]

\* \* \*

Other xantha[n] gums were evaluated and were able to provide a stable suspension of the oil bearing particles but brought about cloudiness to the aqueous phase. [(Emphasis added.)]

Third, Applicants' own application also indicates that (a) not all guar gums are equivalent (of one another or of xanthan gums). Nevertheless (without conceding the point but instead assuming for the sake of argument that one would add a guar gum), one of ordinary skill in the art cannot simply add any guar gum to arrive at Applicants' claimed invention. In fact, as recited in rejected claim 1, the guar gum requires "an initial transparency of at least 85%." There is no teaching or suggestion in Zocchi (or in the secondary references cited as discussed below) to add such a guar gum having an "initial transparency of at least 85%" as recited in the rejected claims.

In support of point (a) above, the Examiner's attention is directed to Applicants' specification from page 1, line 31 to page 2, line 2:

Various other combinations of xanthan gum with a gellation, viscosity enhancing component did not bring about the set of properties which the invention mixture possesses, particularly the enhanced clarity coupled with the increased viscosity.

Examples of these potential agents which did not bring about the desired properties when combined with xanthan gum include other guar gums, alginate gum(s), . . . and a standard thickener such as lauramide diethanolamide. [(Emphasis added.)]

Given that the above-quoted statements appear in Applicants' own specification originally filed, there is no need to file a Declaration under 37 CFR § 1.132 to make the same point in a Declaration as the inventors have already attested to the veracity of these statements upon filing their application. Since the "other guar gums" "did not bring about the desired properties when combined with xanthan gum", it is clear that not all guar gums are equivalent to each other or equivalent to a xanthan gum having an initial transparency of at least 85%. Thus, it is not as simple as asserted in the Office Action to just add any guar gum to the composition of Zocchi. In fact, it has to be a guar gum that does not adversely affect clarity or stability and, it should be a guar gum that improves clarity, improves or maintains stability and improves the viscosity of Applicants' claimed composition.

Finally, Applicants' own specification teaches previously unknown surprising and unexpected benefits achieved from (b) the combination of certain xanthan gum(s) and certain guar gum(s) in Applicants' claimed composition --- such as providing greater clarity and concomitantly increased viscosity as opposed to using a xanthan gum alone.

In support of point (b) above, the Examiner's attention is directed to Applicants' specification at page 1, lines 14-30:

Systems have been developed which have made demonstrative steps in solving these problems [*i.e.*, lack of stability and clarity]. Chief among these is USP 5,681,801 (801) [*i.e.*, Zocchi]. This [Zocchi] patent discloses a clear aqueous cleansing system having stably suspended therein particles bearing water insoluble or essentially insoluble skin or hair conditioning agents. The clarity and stable suspension of particles is achieved through the use of a xanthan gum having certain properties. [(Emphasis added.)]

[However,] [a] new composition has been discovered which provides an aqueous cleansing composition, preferably clear, having stably suspended therein particles bearing water insoluble skin or hair conditioning agents. The clarity and stable suspension is achieved with a mixture of a certain xanthan gum and a certain guar gum. This mixture not only stably suspends the particles, with no loss in clarity, but also provides greater clarity and concomitantly increased viscosity as opposed to xanthan gum alone. A further advantage is that the tendency of the prior art '801 [i.e., Zocchi patent] composition containing only xanthan gum to squirt from its container when subjected to pressure is substantially reduced or essentially eliminated when the xanthan gum is combined with the guar gum of this [i.e., Applicants'] invention. [(Emphasis added.)]

Also, with regard to point (b) above, the Examiner's attention is further drawn to page 8, lines 1-10 wherein the Applicants' composition of Example 1 is said to be superior to "a composition of similar viscosity using xantham gum alone" – see below:

After three months at 43.3°C., the compositions remain visually clear, and no more than 15 NTU turbidity. The particles remain stable as measured visually no grouping together at the top or bottom as well as change of physical shape. No discoloring of the aqueous phase nor of the particles is observed after three months at 43.3°C. There appears to be no effect on lathering at the end of the aging period of three months. The viscosity of the composition is 7500 centipoise and is readily dispensed in an even flow from a squeeze container. It is more readily smoothly pourable from an open container than a composition of similar viscosity using xantham gum alone. [(Emphasis added.)]

In view of the foregoing language expressly recited in Applicants' own specification, several unexpected and surprising advantages are achieved when certain xanthan gums are combined with certain guar gums, each having an initial transparency of at least 85% (see Applicants' rejected claim 1 at sub-paragraphs (c) (i)). These advantages are (1) greater clarity and increased viscosity compared to compositions with xanthan gum alone, (2) substantially reduced or essentially eliminated undesirable "squirt" from container, and (3) same degree of stability over compositions with xanthan gum alone, however, with increased clarity.

In view of points (a) and (b) noted above and the surprising and unexpected benefits (1) – (3) of Applicants' claimed invention, Applicants respectfully submit that rejected claims 1-14 (each reciting a xanthan gum having an initial transparency of at least 85% and a guar gum also having an initial transparency of at least 85%) are unobvious for the reasons noted above and patentable over Zocchi in view of Pyles or Bolich.

**Pyles**

Pyles discloses a laundry list of agents that may be used as substitutes for an "optional nonionic alkanolamide" in the context of the invention of Pyles. The laundry list of agents does not indicate that "guar gum" is an equivalent of "xanthan gum" but instead that the "guar gum" and "xanthan gum" (among the laundry list of members) are equivalents of the "optional nonionic alkanolamide" of Pyles. See Pyles from col. 6, line 63 to col. 7, line 12.

Therein, Pyles indicates:

To achieve the full advantage of the present invention, an optional nonionic alkanolamide is included in the conditioning shampoo composition in an amount of about 0.1% to about 5% by weight to provide exceptionally stable emulsification of water-insoluble conditioning agents and to aid in thickening and foam stability. Other useful suspending and thickening agents can be used instead of the alkanolamides, such as sodium alginate, guar gum, xanthan gum, gum arabic, cellulose derivatives, such as methylcellulose, hydroxybutylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, and carboxymethylcellulose, and various synthetic polymeric thickeners, such as the polyacrylic acid derivatives. Suitable alkanolamides include, but are not limited to, those known in the art of hair care formulations, such as cocamide monoethanolamide (MEA), cocamide diethanolamide (DEA), soyamide DEA, lauramide DEA, oleamide monoisopropylamide (MIPA), stearamide MEA, myristamide MEA, lauramide MEA, capramide DEA, ricinoleamide DEA, myristamide DEA, stearamide DEA, oleylamide DEA, tallowamide DEA, lauramide MIPA, tallowamide MEA, isosteramide DEA, isostearamide MEA, and combinations thereof. [(Emphasis added.)]

In view of the foregoing, Pyles fails to teach that “guar gum” is an equivalent of “xanthan gum.”

Even assuming *arguendo* that Pyles disclosed that “guar gum” is an equivalent of “xanthan gum”, Pyles still fails to teach or suggest that “guar gum” is an equivalent of “xanthan gum” having an “initial transparency of at least 85%” as recited in Applicants’ rejected claims. Furthermore, Pyles does not teach or suggest that the “guar gum” also has the requisite “initial transparency of at least 85%” as required by Applicants’ rejected claims.

In addition to the above-noted shortcomings of Pyles, Pyles also fails to rectify the deficiencies of Zocchi noted above.

**Bolich**

As with Pyles, Bolich fails to teach that “guar gum” is an equivalent of “xanthan gum.” Instead, Bolich indicates that “[e]xamples of such [natural polysaccharide] materials are guar gum, locust bean gum, and xanthan gum.” See Bolich at col. 13, lies 10-12. So, Bolich suffers from the same above-noted shortcomings of Pyles. Further, Bolich does not rectify the shortcomings of Zocchi noted above.

**Conclusion Regarding 35 USC § 103 (a) Rejection of Record**

For these reasons, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-14 under 35 U.S.C. § 103(a).

**Obviousness-type Double Patenting Rejection of Record**

Claims 1-14 are also rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 of Zocchi in view of Pyles or Bolich for the reasons noted at page 8 of the Office Action.

Applicants respectfully submit that their foregoing remarks regarding the rejection of claims 1-14 under 35 USC § 103(a) over Zocchi in view of Pyles or Bolich are equally

applicable to the instant obviousness-type double patenting rejection of record. Thus, Applicants' prior remarks are incorporated herein as if restated here.

For at least these reasons, Applicants respectfully request reconsideration and withdrawal of the obviousness-type double patenting rejection of claims 1-14.

**Conclusion**

Applicants respectfully request that claims 1-20 be allowed to pass to issuance.

**Other Items**

Should there be any other outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge any deficiencies in payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

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By

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